WHAT IS CLAIMED IS:

1. A sensor for detecting an infrared absorbing subject gas in a gas mixture, comprising:

a sensor chamber being generally in the shape of a hollow tube;

an infrared radiation source at a first end of the sensor chamber, operable to generate a beam of infrared radiation along the length of the chamber;

a first filter operable to receive a portion of the beam of infrared radiation and sensitive to a wavelength known to attenuate radiation transmitted through the subject gas;

a second filter operable to receive a second portion of the beam of infrared radiation and sensitive to a wavelength known to not significantly attenuate radiation transmitted through the subject gas;

a chopper operable to selectively and in succession block and pass radiation from the first filter and the second filter; and

an infrared detector for detecting radiation passed through the chopper.

2. The sensor of Claim 1, wherein the chamber is generally circular in cross section.

3. The sensor of Claim 1, wherein the chamber is generally rectangular in cross section.

4. The sensor of Claim 1, wherein the filters and the chopper have a split geometry, such that a first portion of the filters and the chopper operate on a first side of the beam of infrared radiation and a second portion of the filters and the chopper operate on a second of the beam of infrared radiation.

5. The sensor of Claim 1, wherein the filters and the chopper have a split geometry, such that an inner portion of the filters and the chopper operate on an inner portion of the beam of infrared radiation and an outer portion of the filters and the chopper operate on an outer portion of the beam of infrared radiation.

6. The sensor of Claim 5, wherein the outer portion is annular relative to the inner portion.

7. The sensor of Claim 1, wherein the filters are equidistant from the infrared radiation source.

8. The sensor of Claim 1, wherein the first filter is sensitive to a wavelength that attenuates radiation through carbon dioxide.

9. The sensor of Claim 1, wherein the second filter is sensitive to a wavelength of about 3.9 micrometers.

10. The sensor of Claim 1, wherein the first filter is sensitive to a wavelength that attenuates radiation through water vapor.

11. The sensor of Claim 1, wherein the first filter is sensitive to a wavelength that attenuates radiation through gaseous ammonia.

12. The sensor of Claim 1, wherein the radiation source is an incandescent source.

13. The sensor of Claim 1, further comprising a collimating lens operable to receive the beam of infrared radiation from the source and to collimate the radiation within the beam.

14. The sensor of Claim 1, further comprising a focusing lens operable to focus the beam of infrared radiation to the detector.

15. The sensor of Claim 1, wherein each filter receives substantially a one half portion of the beam of infrared radiation.

16. The sensor of Claim 1, wherein the chopper is implemented with at least one liquid crystal device.

17. The sensor of Claim 1, wherein the chopper is implemented with a single liquid crystal device having independently operable areas.

18. A method of detecting an infrared absorbing subject gas in a gas mixture, comprising:

generating a beam of infrared radiation with a light source;

filtering a first portion of the beam of infrared radiation, using a first filter, which is sensitive to a wavelength known to attenuate radiation transmitted through the subject gas;

filtering a second portion of the beam of infrared radiation, using a second filter, which is sensitive to a wavelength known to not significantly attenuate radiation transmitted through the subject gas;

wherein the filters are equidistant from the light source;

using a chopper to selectively and in succession block and pass radiation from the first and second filters; and

detecting radiation passed through the chopper.

19. The method of Claim 18, wherein the filters and the chopper have a split geometry, such that a first portion of the filters and the chopper operate on a first side of the beam of infrared radiation and a second portion of the filters and the chopper operate on a second of the beam of infrared radiation.

20. The method of Claim 18, wherein the filters and the chopper have an annular geometry, such that an inner portion of the filters and the chopper operate on an inner portion of the beam of infrared radiation and an outer portion of the filters and the chopper operate on an outer portion of the beam of infrared radiation.

21. The method of Claim 18, wherein the first filter is sensitive to a wavelength that attenuates radiation through carbon dioxide.

22. The method of Claim 18, wherein the second filter is selective to a wavelength of about 3.9 micrometers.

23. The method of Claim 18, wherein the first filter is sensitive to a wavelength that attenuates radiation through water vapor.

24. The method of Claim 18, wherein the first filter is sensitive to a wavelength that attenuates radiation through gaseous ammonia.

25. The method of Claim 18, wherein each filter receives substantially a one half portion of the beam of infrared radiation.

26. The method of Claim 18, wherein the chopper is implemented with at least one liquid crystal device.